COMMON TERRITORY? COMPARING THE IMP APPROACH WITH ECONOMIC GEOGRAPHY

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Abstract:

The IMP research tradition has always been open to the cross-fertilisation of ideas with other social science disciplines that study similar phenomena. Recent years have seen a growing interest among IMP researchers in phenomena such as regional strategic networks, spatial clusters and innovation and new business development in networks. IMP papers published on these topics are increasingly citing conceptual frameworks and empirical findings from the field of economic geography. This paper discusses the development of IMP thought and the development of thought in economic geography (particularly evolutionary economic geography), and compares their approaches to the analysis of regional phenomena. The goal is to identify key ideas from economic geography that have been under-exploited in IMP research, in order to suggest original new approaches available to IMP researchers interested in these fields. A number of such ideas are explored: proximity as a multi-dimensional and multi-faceted concept; the distinction between, and relative importance of, learning activities arising automatically from being embedded in a community (local or regional buzz) and learning activities arising from positive investment in channels of communication (pipelines); the concept of relational capital developed by economic geographers; and, conceptualisations of externalities commonly used in the study of spatial clusters.

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INTRODUCTION

IMP researchers have frequently sought inspiration from other fields of enquiry in order to pursue their fundamental goal of understanding business interaction in industrial networks. In this paper, we suggest that there is much to be learned from the cross-fertilization of ideas between the IMP (industrial networks) approach (Andresen, Lundberg, & Roxenhall, 2008; Eklinder-Frick, Eriksson, & Hallén, 2011; Eklinder-Frick, Eriksson, & Hallén, 2012) and the field of economic geography, particularly evolutionary economic geography (Bathelt, Malmberg, & Maskell, 2004; Bathelt & Schuldt, 2008; R. A. Boschma, 2005; Capello & Faggian, 2005; Frenken & Boschma, 2007). The essence of the argument is that these two fields of enquiry often address similar (arguably identical) research problems, particularly those pertaining to the analysis of regional development networks, but with subtly distinct conceptual armouries. The purpose of the paper is to conduct a systematic comparison of the industrial networks approach and economic geography along a number of key dimensions, in order to identify conceptual similarities and differences between the two fields, with the goal of contributing to conceptual development in both fields through a process of cross-fertilization. Put simply, our contention is that the two fields of enquiry have proceeded in parallel, often investigating very similar empirical phenomena, but have developed slightly different intellectual tools for the job. Interestingly, only a small number of papers in the field of B2B marketing prior to 2008 cite any work from core economic geography journals, although there is some evidence of an increase in citations since then. Consequently, a more rigorous comparison between the IMP approach and approaches used in economic geography seems timely.

The paper proceeds as follows. First, we briefly summarise the conceptual development of IMP thinking and of economic geography. Next, we outline the procedure through which the argument within this paper was constructed. The two main bodies of research findings within the IMP tradition which seem to have the greatest synergies with discussion taking place in EG are outlined before we enter a deeper discussion of those synergies. We highlight both points of synergy and the suggest points for enhanced future synthesis. We conclude our paper with discussion of the main findings and suggest a route forward.

THE IMP APPROACH

This paper is written for the IMP conference and it is presumed that readers will have some familiarity with the development of IMP thinking and the principal conceptual frameworks characteristic of IMP thought. Consequently, we will not provide a comprehensive description of the IMP perspective here, but simply offer a brief and succinct introduction along with citations to other works in which more detailed descriptions can be found if desired. According to Håkansson (1982) the first meeting of what became the IMP Group was held in September, 1976. The first international IMP study (IMP1) ensued, eventually resulting in the publication of "International Marketing and Purchasing of Industrial Goods: An Interaction Approach" (Håkansson, 1982). This work identified the conceptual origins of IMP research in inter-organisational theory, new institutional economics and the "distribution systems perspective" in

marketing research. Håkansson (1982) argued that the relationship rather than the discrete transaction is the appropriate unit of analysis in business markets; that both the buyer and the seller are active participants in an interaction process; that there is considerable stability of relationship structures in business markets; and, that buying and selling are similar processes that should be studied simultaneously. The central conceptual framework at this time was the Interaction Model, comprising the buying and selling parties to the relationship (each sub-divided into the individual and the organisational level), the interaction environment (e.g. market structure), the relationship atmosphere (power-dependence; conflict-cooperation; closeness-distance; mutual expectations), and the elements and processes of interaction (short-term exchange episodes and long-term relationship processes).

The concept of a relationship life-cycle, although only briefly mentioned in the 1982 book, had been proposed in detail by Ford (1980). This is not the place to provide a lengthy discussion of the subsequent controversies over whether or not such a life cycle "exists" in any meaningful sense; in any case, the interested reader will find an excellent summary of the extensive literature on growth-stage models of business relationships in Kaunonen (2010). Suffice it to say that considerable attention has been paid to the question of whether or not the process of relationship development can usefully be analysed in terms of a life-cycle, or "stages", or "states". Although this work might be argued to form the beginnings of a longer-term interest in concepts of time industrial relationships (see for instance later work by Medlin, 2002, 2004; Plakoyiannaki & Saren, 2006; Quintens & Matthyssens, 2010) to date, no consensus exists on an IMP conceptual framework in this area. The related topic of relationship portfolios has also attracted considerable attention from IMP researchers; Zolkiewski and Turnbull (2002) provide a good summary of the state-of-the-art.

The work edited by Håkansson and Snehota (1995) represents the principal exposition of industrial network theory, an important development in IMP thinking. The relationship unit of analysis is not abandoned, and it is emphasised that structural elements of relationships (continuity, complexity, symmetry and informality) and process elements (adaptations, cooperation-conflict, social interaction and routinisation) remain of interest and important. However, the influence of one relationship on another takes centre stage, with chain dependencies between relationships resulting in "a form of organization we have chosen to qualify as a network" (Håkansson & Snehota, 1995 p19). Change in one relationship can propagate through the network of interconnected relationships, and the network "form of organization" is a rather curious one that has neither a centre nor boundaries. Relationships are conceptualised to have three layers, and each business relationship can be characterised in terms of the relative importance and the complexity of each of the three layers. These three layers are the elements of the best-known conceptual framework to emerge from Håkansson and Snehota (1995): the AAR (activities, actors, resources) model. The relationships within an industrial network can be analysed in terms of the links between their activities, the ties between their resources, and the bonds between their actors. Alongside the AAR model, which Håkansson and Snehota (1995) deemed the "substance" of the relationship, they also proposed three "functions" for the relationship: the function for the dyad, the function for the individual firms, and the function for third parties (i.e. the function within the wider network of which the relationship is a part).

Work has continued within the IMP Group to refine and elaborate upon the concepts that were first expounded in detail in the 1980s and 1990s. For example, Ford and colleagues (2008) revisit the fundamental concept of interaction, and several researchers have continued to explore the concept of relationship atmosphere (Examples: Blois & Ryan, 2010; Sutton-Brady, 2001). Prominent new strands of research that have emerged more recently include the question of whether strategic action is possible in networks and if so, how (Baraldi, Brennan, Harrison, Tunisini, & Zolkiewski, 2007; Ford & Mouzas, 2007; Mouzas, 2001); the idea of network pictures—managers' subjective representations of their relevant business environment (Naude, Mouzas, & Henneberg, 2004); and the transferability of the basic IMP conceptual frameworks across cultures, with particular reference to Chinese culture (Jansson, Johanson, & Ramström, 2007; Kriz & Fang, 2000). Particularly relevant to the present paper are the emerging strands of IMP research that investigate regional strategic networks and innovation in networks (Cantù, 2010b; Cantu & Corsaro, 2011; Eklinder-Frick et al., 2011; Eklinder-Frick et al., 2012), since it is here that we might expect to find the closest parallels to work in EG. That topic will be addressed in the discussion section of this paper. For the moment, having provided a very brief and necessarily incomplete overview of the development of IMP thought, we will now turn to the field of economic geography, to which we will devote greater space since this will no doubt be less familiar ground for our intended readers.

ECONOMIC GEOGRAPHY

Economic geography (EG) could be seen as an interdisciplinary endeavour between economics and geography. However, it is geography that has been its custodian. EG has emerged from a tug-of-war between its two 'parent' disciplines. There have been periods where the field is suspended in tension between the two parents, where one of the parents seems to have the upper hand, and where no parent seems to be doing any pulling (P. Maskell, 2001). The first EG journals emerged around 1910 in the Netherlands ("*Tijdschrift voor economische en sociale geografi*" TESG), and around 1925 in the USA ("*Economic Geography*"). At the time Blink (1910), the founding editor of TESG, saw economic geography as an applied discipline able to provide explanations of how economic activities interact with the geographical environment to determine the welfare of the population of a certain area. By 1925 when *Economic Geography* was launched it still echoed similar utilitarian problems such as "the intelligent utilization of the world's resources" to which more humanistic concerns like the "better understanding and a more intelligent sympathy between the various peoples of the world" were added.

Up to the 1950s EG was primarily characterised by quantitative approaches. By the 1960s, in economics Simon had launched his assault on rational decision making, while in geography Harvey had abandoned his previous positivist and quantitative approach and begun through a series of landmark publications (1969-2012) to favour more radical socialist, activist, and eventually anti-capitalist accounts. The study of regions (and the problems associated with differential regional growth rates) also became prominent in Europe/the EEC; for example the journal *Regional Studies* was established in the UK in 1967. Developments in EG during the 1960s took a number of different trajectories of which we highlight two as characteristic of this period. First, behavioural EG reflecting the *zeitgeist* and questioning the behavioural axioms of *homo economicus*; Wolpert's work in Sweden can be taken as characteristic of the behavioural/satisficing EG programme (Wolpert, 1964, 1965). Second, regional economics emerged, taking the region as the dominant spatial scale.

During the aforementioned periods, with a few notable exceptions (Krumme, 1969; McNee, 1958), "the interest of the economic geographer usually ends at the factory doors" (P. Maskell, 2001, p. 330). The interest in the firm in EG burgeoned during the next 30 years through a series of publications (such as Amin & Cohendet, 1999, 2000; P. Dicken, 1971; Peter Dicken & Malmberg, 2001; Lee & Wills, 1997; Peter Maskell, 2001; Storper & Walker, 1989) that could be read as an attempt to reconcile alternative theories of the firm (e.g. function, principal/agent, contract, governance, evolutionary), and which converged on the notion of 'routines'. This effort involved attempts to link the firm to the territory. Perhaps the most noteworthy breakthrough in this endeavour was the conceptualisation of the "firm-territory nexus" (Peter Dicken & Malmberg, 2001, p. 347). That is, the nexus of relationships that embed firms to other firms and institutions in a territory (including their particularities, attributes, and histories).

This brings our discussion to the most interesting period for industrial marketing scholars; the 1980s. Bathlet and Glückler (2003, p. 119) for example write about this period: "[s]ince the late 1980s, a wealth of new perspectives, methods, and conceptualisations has developed that involves compelling ideas". 'New economic geography' as defined by researchers such as Krugman (1991) and Fujita et al. (2001), emerged during this period, with the aim of pursuing novel research programs using novel methodological approaches (Masahisa Fujita & Krugman, 2004; Paul Krugman, 1998). This search for novelty produced several perspectives that should be of interest to industrial marketing scholars. A key topic that emerged was an interest in untraded interdependencies (Lundequist, 2002; Maskell & Malmberg, 1999; Storper, 1995, 1997). Storper (1995) refers to untraded interdependencies as non-material assets that go beyond those available through traded interdependency, generated as the result of business interaction.

For our purposes we concentrate on two noteworthy themes that emerged within the new economic geography: the 'cultural turn' (Amin & Thrift, 2000) and the 'relational turn' (Boggs & Rantisi, 2003). The cultural turn in economic geography pursues an interest in the "spatially variable sets of socio-cultural conventions, norms, attitudes, values, and beliefs" (Martin & Sunley, 2006, p. 1). Underpinning this cultural turn is an interest in "behavioral rules" (Heiner, 1983, p. 561) or "routines" (R. A. Boschma & Frenken, 2010, p. 11) that guide and/or constrain individual and firm behaviour (P. Maskell, 2001). A second theme is the relational turn (Boggs & Rantisi, 2003). Within this body of thinking geographic proximity is reconceptualised as relational proximity (Gertler, 2003), "overcoming the teleological and under-socialised nature of past approaches" (Boggs & Rantisi, 2003, p. 110) deployed to understand regional competitiveness. Further work refers to 'relational space' rather than local geographic space; relational space "is made of all the different relationships built among local actors" (Capello & Faggian, 2005, p. 78). 'Relational' in the context of relational economic geography refers to a:
"Specific mode of economic coordination that is based on strong ties and long-term reciprocal relationships". Typically, these relationships are described as informal, face-to-face, collaborative and cooperative and are characterized by the exchange of knowledge and high degrees of mutual trust" (Sunley, 2008, p. 4).

A relational economic geography perspective, "in part taking its cue from the conflation of social embeddedness with geographical embeddedness, emphasizes the importance of relational proximity over spatial proximity" (Boggs & Rantisi, 2003, p. 113). Within this approach, social

and geographic proximity and social capital can be re-cast as stocks of relational capital. "Relational capital is defined as the set of all relationships – market relationships, power relationships and cooperation – established between firms, institutions and people that stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions". (Capello & Faggian, 2005, p. 77). As such, there is some significant overlap between the cultural and relational turns in EG. Indeed, Bathelt & Glückler (2003, p. 119) discuss these 'turns' as more indicative of transitions that are "neither incommensurable nor do they occur abruptly".

Another approach, distinct from the cultural and relational turns, is evolutionary economic geography (R. A. Boschma & Frenken, 2006b). Evolutionary economic geography (EEG) draws inspiration from breakthroughs in the parent discipline of evolutionary economics (Nelson & Winter, 1982). However, evolutionary economics itself drew inspiration from evolutionary biology (neo-Darwinian approaches) and complexity science. Thus, its conceptual framework includes notions from both of these fields, such as variety, selection, fitness, adaptation, self-organisation, and emergence (to name but a few). Boschma and Martin (2010, p. 6) suggest that EEG represents "the processes by which the economic landscape – the spatial organisation of economic production, circulation, exchange, distribution and consumption – is transformed from within over time". As they further adduced a progressive EEG route to these processes is through "a dynamic network approach that also accounts for the fact that the spatial evolution of network structures may, in turn, affect the degree of the different forms of proximity" yielding thus an understanding of "spatial evolution of networks as a truly endogenous process" (R. Boschma & Martin, 2010, p. 10). This has been pursued at different spatial scales that could be delineated as the micro (e.g. entrepreneur, firm), meso (e.g. network, sector/industry), and macro levels (e.g. city networks, the global economy).

METHOD

The research method is a systematic, comparative analysis of the conceptual frameworks employed by the two fields of enquiry. Several prior studies by IMP researchers have employed this research method. For example, Mattsson (1997a) conducted a comparative analysis of the IMP approach with the relationship marketing stream of research, Baraldi et al (2007) compared the IMP approach to strategy with other schools of thought such as the planning school and the learning school, while Wilson and Brennan (2001) compared the IMP approach to Chinese/Western business relationships with approaches based on Chinese cultural concepts. It is also interesting that IMP researchers have quite frequently been drawn to investigate the relevance of evolutionary theory and models to the industrial networks body of knowledge (Aastrup, 2003; Brennan, 2006; Easton, Wilkinson, & Georgieva, 1997; Uusitalo & Möller, 1997). This immediately suggests a possible convergence of interests with economic geography. Boschma and Frenken (2006b) have argued that evolutionary approaches are of such growing importance that evolutionary economic geography constitutes an emerging new paradigm.

As the focus for our systematic, comparative analysis we have selected two sub-fields within IMP research: regional strategic networks, and innovation and new business development in networks. The rationale for selecting these two sub-fields is that, first—because of their subject matter—there is a manifest *prima facie* case for expecting insights from economic geography to be relevant, and, second, there is considerable evidence that these are considered to be important

contemporary research topics by IMP researchers. Recent years have seen papers about these topics emerge from the IMP conference to be published in the premier journal in the field, *Industrial Marketing Management*, (Cantù, 2010b; Eklinder-Frick et al., 2011; Persson, Lundberg, & Andresen, 2011). Meanwhile, there has been considerable interest in these topics at the annual IMP conference and in the *IMP Journal* (Bernardi, Boffi, & Snehota, 2012; Cantu & Corsaro, 2011; Emmoth, Persson, & Lundberg, 2012). In short, these are "happening topics" within IMP.

COMPARISON OF BASIC ASSUMPTIONS

Table 1 presents a tentative comparative analysis between evolutionary economic geography and the IMP perspective along the dimensions of unit of analysis, key assumptions, methodology, conceptualisation of time, and geography/space. This analysis is conducted in the spirit of earlier analyses, such as Mattsson's (1997b) comparison of IMP (the markets-as-networks approach) with relationship marketing, and Brennan's (2006) comparison of IMP with evolutionary economics. The analysis suggests a degree of common ground between the two approaches: notably, both reject the assumptions of neo-classical economics, appreciate the value of inductive theorising, and incorporate the assumption of path dependence. However, while EEG retains the conventional units of analysis from evolutionary economics (the firm and the routine), the IMP approach concentrates on the space between firms (interactions, relationships, networks). Interestingly, prominent IMP scholars have recently called for greater attention to be paid to the dimensions of time and geography/space, which they contend have been under-theorised in IMP research (Peters, Vanharanta, Pressey, & Johnston, 2012; Tornroos, Halinen, & Medlin, 2012).

Table 1: Comparative Analysis of Evolutionary Economic Geography and IMP

	EEG	IMP
Unit of analysis (basic)	Routine Firm	Interaction Inter-firm relationship Network
Methodology	Inductive and deductive Appreciative theorizing Formal modelling	Inductive Qualitative case studies Large-scale surveys
Key assumptions	Satisficing agent Contextual (micro) Firm success dependent routines developed in the past/founder (path dependence)	Heterogeneous, learning firms Open systems Path dependence Buying/selling are simultaneous processes Buyer/seller relationships are common, stable, enduring
Conceptualization of time	Out of-equilibrium analysis Recursive	Multi-faceted time Subjective/objective time
Geography/space	Neutral space⇨Real place Path dependence	International & regional development Network configuration

Sources: (Baraldi et al., 2007; R. A. Boschma & Frenken, 2006b; Brennan, 2006; Mattsson, 1997a; Peters et al., 2012; Tornroos et al., 2012)

KEY AREAS OF SYNERGY BETWEEN IMP AND EG

The discussion now focuses on two themes of current interest within the IMP research community that have also been investigated by economic geographers—regional strategic networks, and innovation/new business development in networks. We proceed first with a brief summary of recent IMP research in each field, and then move on to compare this with insights available from EG research.

REGIONAL STRATEGIC NETWORKS

Recently, Cova, Prevot, and Spencer (2010) have provided a useful taxonomy of the perspectives on "space" used in B2B research; a territory perspective, an industry perspective an alliance perspective and a community/kinship perspective. Tracing this work chronologically it is increasingly apparent that more recent work in IMP scholarship has begun to use terms familiar to EG scholars such as industrial cluster and science and technology parks (Eklinder-Frick et al., 2012; Felzensztein, Huemer, & Gimmon, 2010; Frisillo, 2007; Tunisini, Bocconcelli, & Pagano, 2011) (Cantu & Corsaro, 2011). Indeed these works make significant explicit reference to EG journals. This suggests a narrowing of the territory concept from a broader to a narrower unit of spatial analysis, which has been referred to in IM scholarship as co-location (Nicholson, Tsagdis, & Brennan, 2013) . Indeed, within this strand of research, work has begun to examine

how social capital can both constrain and enable local network performance (Eklinder-Frick et al., 2011; Nicholson et al., 2013). This body of work considers links between the core network in the supply chain and other co-located actors (Eklinder-Frick et al., 2011) including other non-commercial actors such a universities and the public sector (Heléne Lundberg & Andresen, 2012; Nicholson et al., 2013). Also work within IMP has begun to consider the roles of different proximities that go beyond simply geographic proximities. An example is work by Tunisini, Bocconcelli, and Pagano (2011) which examined the role of leading players in a cluster when sourcing from local as opposed to more distant suppliers. The main aims of this body of research are to explain the formation of strategic networks between co-located actors.

INNOVATION AND NEW BUSINESS DEVELOPMENT IN NETWORKS

There is considerable overlap between this category of IMP research and the field of EG. A uniting theme is a study of proximity, but a number of distinctive themes can be discerned. Cantù, (2010a) for instance, examines the links between the different types of proximity and innovative performance. The most recent IMP work has begun to adopt terms familiar to EG scholarship, notably externalities and clusters (Felzensztein et al., 2010). The focus on clusters in IM scholarship (Eklinder-Frick et al., 2012; Felzensztein et al., 2010; Frisillo, 2007; Tunisini et al., 2011) has aimed to understand the structure of regional networks and explain the impact on industry competitiveness. Work on social capital has moved from broader examination of innovation on a national level (Butler & Purchase, 2008; Mei-mei & Ka-leung Moon, 2008) to examine social capital between co-located actors, for instance, examining the constraining nature of over-embeddedness (Eklinder-Frick et al., 2011; Nicholson et al., 2013) and the need for local networks to draw ideas from outside local environment. However, this work firmly focuses on local innovativeness. The body of work extends to the examination of SME formation and development (Partanen, Möller, Westerlund, Rajala, & Rajala, 2008) and the impact that innovative local suppliers have on firm performance (Schiele, 2006). The second body of findings therefore are increasingly drawing conclusions with regard to local innovativeness.

DISCUSSION

AREAS OF CONCEPTUAL OVERLAP

In the preceding section it was established that IMP scholars are increasingly taking an interest in the local dynamics between geographically co-located actors. In the EG literature, Cooke (2002, p. 79) suggests that "if the partners are co-located, the reductions in uncertainty, time lag, and transaction costs are clearly palpable" which he sums up as "the economies of proximity". Proximity can concern different social fields. Different social fields are defined as those relating to independent individuals, firms and institutions, and can relate to different geographic spaces (Floysand & Jakobsen, 2002), all of which are of interest to IMP scholars. Different notions of proximity have been examined within the EG literature and recent work follows Boschma's (2005, p. 62) call to "isolate analytically, the effect of geographical proximity from other forms of proximity," This so-called "de-territorialisation of closeness" has led to the consideration of other forms of proximity, namely cognitive, organizational, social, institutional and relational (Boggs & Rantisi, 2003; R. A. Boschma, 2005; Gertler, 2003). This body of work examining proximity cuts across both relational and evolutionary economic geography.

The focus on geographic proximity through the medium of clusters has recently become more explicit in IMP research. In EG, authors argue that after 1992 there was a move in from theories of spatial clustering based purely on transaction cost analysis towards increased interest and acceptance that untraded interdependencies play a significant part in explaining the success of competitive regions (Lundequist, 2002; Maskell & Malmberg, 1999; Storper, 1995, 1997). Storper (1995) refers to untraded interdependencies as non-material assets generated as the result of business interaction beyond those available through traded interdependency. Trippl, Todtling, and Lengauer (2009, p. 448) qualify traded exchange and interdependency as involving "monetary or other forms of compensation for particular knowledge flows," whereas non-traded and informal exchange and interdependencies have "no specific immediate compensation." The IMP AAR model seems relevant to the examination of such untraded interdependencies. Storper (2000, p. 151) proposes that untraded interdependencies are to do with "spill-overs of knowledge", discussed by Ibrahim, Fallah, and Reilly (2009, p. 412) as the "useful local sources of knowledge found in a region, that were obtained beyond the recipients' organization, and that affected the innovation of the recipient." Spillovers may generate externalities, but also that they are geographically bounded (Ibrahim et al., 2009). Felzensztein, Huemer, and Gimmon (2010) made an examination of marketing externalities in a cluster, but as yet, spillovers have escaped substantial examination within the IMP. There is an opportunity to advance understanding of how network externalities affect knowledge transfer between co-located partners.

Different notions of agglomeration economics in EG influence the nature and meaning of these knowledge spillovers. Isaksen and Onsager (2010) divide such theories of agglomeration into three sub-categories. The first focuses on different mixes of local economies which Isaksen and Onsager refer to as 'Jacobs externalities.' Storper and Venables (2004) cite Jacobs (1969) as advancing the idea that "cities enjoy an advantage because of their economic and social diversity" (Storper & Venables, 2004, p. 352) and that this stimulates serendipitous contact between geographically co-located individuals. Isaksen and Onsager (2010) suggest that as a result firms learn from other firms in different and diverse sectors. Isaksen and Onsager's (2010) second category comprises economies achieved between firms from different but related sectors and industries. The co-location of complementary actors allows for higher absorptive capacity. A third category referred to by Isaksen and Onsager (2010) is the so called "MAR externalities" notion of specialization (Arrow, 1962; Marshall, 1919; Romer, 1986). Porter's (1998) perspective on clusters adds competition as an important element of externalities. Beaudry and Schiffauerova (2009) discuss the contrast between Porter, MAR and Jacobs externalities. They argue that Porter and Jacobs share common ground in respect of the central importance of competition, but differ on their perspective to specialization. MAR and Porter share a similar perspective on the importance of specialization. Scholars within the IMP Group have taken an interest in clusters, mostly at the level of single industry studies. This work seems simply to be examining clusters as essentially collaborative spaces, so accepting an MAR definition of clusters. It is probable that more could be learned by examining regional strategic networks, underpinned by the Jacobs or Porter notions of clusters.

Beyond geographic proximity, social proximity is micro-level embeddedness between co-located actors characterized by mutual trust, friendship, kinship, politics, religion and experience (R. A. Boschma, 2005; Newlands, 2003). Such a relational theme has been discussed further by relational economic geographers who interpret geographic proximity and social capital as stocks of relational capital. "Relational capital is defined as the set of all relationships – market

relationships, power relationships and cooperation – established between firms, institutions and people that stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions." (Capello & Faggian, 2005, p. 77). They further note that "the concept of relational capital has a striking resemblance with the concept of social capital," and suggest that that their preference for the relational capital term over social capital is based on the logic that "social capital exists wherever a local society exists, while relational capital refers to the (rare) capability of exchanging different skills, interacting among different actors, trusting with each other and cooperating." Relational capital would seem in this sense to be analogous to the notion of net social capital as discussed by Bowey and Easton (2007), but more recently has been discussed by IMP scholars in the context of the interplay between firm and regional competitiveness (Nicholson et al., 2013). A particular thread of IMP research has enthusiastically examined social capital (Bowey & Easton, 2007; Eklinder-Frick et al., 2011; Eklinder-Frick et al., 2012). In the local network perspective, social capital has been researched as a means of creating bonds and relational strength between locally embedded network actors.

Organizational or organized proximity refers to a spectrum within which actors have different levels of bonds and economic and financial interdependencies in respect of the organization of production. It refers to the separation between hierarchies and network forms of organization attests to the ability of an organizational hierarchy to make its members interact with each other (R. A. Boschma, 2005; André Torre & Gilly, 2000; Andre Torre & Rallet, 2005). Cova, Prevot, and Spencer (2010) have recently discussed the dichotomy of dyadic versus network forms of organization and proposed a series of bridging meta-dimensions that includes recognition that networking is conducted internally between organizations, between parts of organizations and between whole organizations. Organizations can be centred around a focal individual, institution or firm. IMP perspectives have examined matters relating to network governance, including the role of lead firms and adaptations between buyer and suppliers (Perna, Baraldi, & Gregori, 2012).

Boschma (2005) explores the concept of institutional proximity, which has high levels of overlap with organizational and social proximity. Institutional proximity includes formal (laws and rules) and informal aspects (cultural norms, routines, common habits.). Sets of such rules and norms define boundaries between industry sectors and organisational sectors (public, private and third sectors). Similarly, some IMP studies have examined interaction between sectors, for instance between non-commercial institutions in networks (Frisillo, 2007; Heléne Lundberg & Andresen, 2012; Nicholson et al., 2013). Work within IMP considering clusters has generally examined cognitive proximity between firms in the same industry (Felzensztein et al., 2010; Frisillo, 2007; Mei-mei & Ka-leung Moon, 2008; Tunisini et al., 2011). However, a suggestion from EG scholarship is that too much proximity can be constraining (Broekel & Boschma, 2011; Isaksen & Onsager, 2010; Nooteboom, Van Haverbeke, Duysters, Gilsing, & van den Oord, 2007) and can lead to the phenomenon of cognitive lock-in (R. A. Boschma, 2005). Since spill-overs are unintentional, there may be a disincentive for firms to locate in a geographic space with high cognitive proximity to other co-located actors. Too much cognitive similarity is less likely to lead to synergies than when two actors have dissimilar knowledge (Broekel & Boschma, 2011). Returning to Isaksen and Onsager (2010), the notion of related activity and dissimilar activity (Jacobs externalities) can be seen as a spectrum. The cognitive proximity paradox can be demonstrated in this respect as an inverse U-shape and optimal levels of synergy are achieved by

having some cognitive distance and some cognitive proximity. Nooteboom et al. (2007, p. 1031) suggests that "while there may be increasing returns in absorptive capacity, improving the general ability to understand and appreciate novelty value in collaboration, there are decreasing returns to knowledge in finding further novelty: the more one knows the further away one has to look for novelty." Within IMP, over-embeddedness has been discussed by Eklinder-Frick, Eriksson, and Hallén (2011) and Nicholson, Tsagdis, and Brennan (2013) in the context of relational proximity.

The dynamics of cognitive proximity and distance help to explain the impact of diverse and specialized knowledge transfer in networks. One line of research that has offered insight into such interplay has been work which considers bridging and bonding forms of social capital (Eklinder-Frick et al., 2011; Eklinder-Frick et al., 2012). Bridging social capital is a construct that promises to deliver potentially revelatory findings in respect of innovation linked to diverse knowledge, rather than simply the single industry specialized source of knowledge. It has been found in EG literature that Jacobs externalities are more important in attracting new industries, whereas MAR externalities are important in keeping them (Henderson, Kuncoro, & Turner, 1995; Neffke, Henning, Boschma, Lundquist, & Olander, 2011). MAR externalities have also been found to be more significant for low to medium-technology industries, with Jacobs externalities more important in high technology sectors (Greunz, 2004). Hence there is scope with the IMP approach to apply the AAR toolbox to the study of how bridging social capital contributes to innovativeness in new and old industries. Malmberg and Maskell (2001) have criticised the tendency of EG researchers to ground studies in regional success stories rather than in weaker regions. It is interesting to note that both EG and the IMP respect Granovetter's (1973) notion of the strength of weak ties, where transmission of new knowledge is be more dependent on weak ties than strong ties (Hauser, Tappeiner, & Walde, 2007).

Autant-Bernard and LeSage (2011) note that face-to-face contact in local geographic space takes on greater significance in securing Jacobs externalities, because those working in different industries are more likely to meet when they work near each other. Storper and Venables (2002, p. 14) assert that face-to-face contact facilitated by co-location "takes on many different levels at the same time, verbal, physical, contextual, intentional, [and] non-intentional," and many authors stress the importance of these factors in the transmission of tacit knowledge (Anderson, Bjorkman, & Furu, 2002; Bathelt, Malmberg, & Maskell, 2002; Brown, Dev, & Lee, 2000). Within co-located space, actors are not scanning their environment in a typical marketing intelligence gathering fashion, "but rather are surrounded by a concoction of rumours, impressions, recommendations, trade folklore and strategic information. It is almost unavoidable to receive information, rumours and news about other cluster firms and their actions" (Grabher, 2002, p. 209). This "information and communication ecology created by face-to-face contacts," (Bathelt et al., 2002, p. 11) has been referred to as 'regional buzz' (Bathelt et al., 2002, 2004; Storper & Venables, 2002, 2004). "Participation in the local buzz may not require specific investments. The firms in the cluster do not need to search their environment for information because they are surrounded by a densely knit web of gossip, opinions, recommendations, judgments and interpretations from which they cannot escape" (Bathelt, 2007, p. 1290). Asheim, Coenen, and Vang (2007) note the importance of separating notions of face-to-face and regional buzz when analyzing different contexts. Regional buzz takes on greater importance in creative industries, utilizing 'symbolic knowledge bases.' Industries which rely on engineering or scientific knowledge bases may rely more on F2F than regional buzz for problem solving. Such a

distinction would seem to have significant value to IMP scholarship. There are some acknowledged problems in EG with the measurement of concepts such as relational space and regional buzz. Regional buzz does not yet have a clear definition (B. Asheim et al., 2007), and similarly terms such as relational space remain conceptual; "an important shortcoming of the conceptually challenging work on relational proximity is the lack of empirically sustained work on this topic" (B. Asheim et al., 2007, p. 659). This may result from the prevailing techniques used by economic geographers, which favour explanations of phenomena independent of space rather than explaining space as an element of a phenomenon. Asheim, Ejermo, and Rickne (2009) for instance note that the analytical task in explaining phenomena such as regional buzz is both contextual and relational. Granger and Hamilton (2010, p. 49) further note that "observing and measuring innate and tacit characteristics and processes, which are germane to the creative economy, raises research dilemmas". Many proxies used in business and policy research, such as Standard Industrial Classification (SIC) and SOC (Standard Occupational Classification), seem utterly unsuitable for the features of a contemporary creative economy. This is because measurement systems needed to capture the essence of an advanced knowledge-driven economy such as creative mobilization are insufficient in number and research rigour, and researchers must instead apply traditional accounting methods and vocabulary such as outputs, expenditure and industry, which have less salience in a post-industrial context. It is probable that the AAR toolbox might address some of these empirical problems.

Maskell and Malmberg (2007) discuss the concept of regional myopia, a form of vision limited by regional possibilities. Such myopia occurs when regional actors "enshrine and perpetuate established values and business relationships and so inhibit entry to sectors with different backgrounds and traditions" (Clark & Smith-Canham, 1999, p. 233). Maskell and Malmberg (2007, p. 603) note that such conditions create "lock-in to a fated path where development is constrained within a progressively narrower range of possibilities." To avoid such rigidities, a number of authors discuss the complementary interaction of regional buzz with global pipelines (Bathelt, 2007; Bathelt et al., 2002, 2004; Maskell, Bathelt, & Malmberg, 2006; Trippl et al., 2009). Bathelt (2007, p. 1290) for instance suggests that alongside regional buzz, "supra-regional linkages or pipelines are important in order to find out about other markets and technologies and avoid negative lock-in." The literature discussing pipelines see them more as a deliberate endeavour where regional buzz is thought to be unplanned and spontaneous (Trippl et al., 2009)."By deliberately investing in building pipelines to distant communities and by augmenting their absorptive capacity some firms attempt to increase the variety of routines available to them and escape the potential lock-in stemming from myopic search procedures" (Maskell & Malmberg, 2007, p. 609). Oerlemans and Meeus (2005) support the contention that geographic proximity facilitates knowledge spillovers. However, they found that firms that have both intra- and interregional flows tend to outperform others in innovativeness, while those with only one or the other underperform. In other words, combinations of local and non-local linkages are found to be superior in knowledge transfer terms. Both Bathelt (2007) and Maskell & Malmberg (2007) emphasize the importance of global pipelines alongside regional buzz, but point out that the existence of global pipelines alone does not ensure the avoidance of lock-in. Pipelines must exist alongside the ability to assimilate this knowledge into firms. Such ability in a firm is referred to as an absorptive capacity (Cohen & Levinthal, 1990; Zahra & George, 2002). An absorptive capacity is closely linked to a firm's previous knowledge, so containing a strong temporal dimension. "A firm's prior related knowledge enables it to recognize valuable new information, assimilate and apply it to commercial ends" (Klavans & Deeds, 1997, p. 107).

This absorptive capacity must therefore be an element of regional buzz and a factor in relational capital. Graf (2010) discusses the important role of gatekeeping organisations in global pipelines. He finds that it is not the size of the organisation that plays the major role in determining the potential for gatekeeping, but instead that it is their absorptive capacity that is a better determinant. Within the IMP tradition a number of authors have started to examine the links between local and broader geographic dimensions (Mandják, Simon, & Szalkai, 2011; Tunisini et al., 2011). There seems to be an opportunity to extend this research to consider the interplay between regional buzz (atmosphere) and global pipelines in knowledge transfer through international and local network linkages.

AREAS OF METHODOLOGICAL OVERLAP

There are interesting parallels between the methodological approaches of EG and IMP. Yeung (2005, p. 37) highlights that the relational turn in EG requires consideration of both agency and structure in the analysis of relationship space. He suggests an analytical focus on the "complex nexus of relations among actors and structures that effect dynamic changes in the spatial organization of economic activities." It is these dynamics of agency and structure that became the focus in designing an appropriate research approach. Similarly Dicken et al. (2001, p. 94) argue that:

> "network relationships should be understood as being *both* structural *and* relational. Networks are structural, in that the composition and interrelation of various networks constitute structural power relations, and they are relational because they are constituted by the interactions of variously powerful social actors. These relationships can exist in the forms of rules, conventions, values, regulations and so on."

Yeung (2005, p. 44) further calls for an:

> "iterative process of drawing interconnections between two or more discrete categories and phenomena that may not necessarily be binaries. Thinking about relationality necessitates an analytical movement away from abstract phenomena (e.g. the firm or the network) to examine the interconnections between discrete phenomena and to transcend their dichotomization."

Yeung's concerns seem to mirror those of Cova et al (2010); both seem to advocate a pluralistic approach to the study of regionally embedded relational phenomenon.

Boschma & Frenken (2006a, pp. 278-279) note that when deploying an evolutionary economic perspective (rather than neo-classical or institutional approaches), one should focus on the "historically grown spatial concentration of knowledge residing in organizational routines." Boschma (2005, p. 68) further notes that "institutions are enabling or constraining mechanisms that affect the level of knowledge transfer, interactive learning and (thus) innovation." A theory that encapsulates structures as both enabling *and* constraining is essential to gain insight into both proximity *and* distance as structural properties. This methodological imperative has recently been discussed in the IMP tradition (Nicholson et al., 2013). Torre and Gilly (2000) seem to support this interpretation of proximity when they suggest that they are "aware of the advantages

and the dynamism that proximity can bring about, but they can also be a factor of mistrust or a brake."

Discussion within the IMP tradition has more recently turned to the agency-structure debate with advocacy of theoretical approaches grounded in critical realism (Easton, 2002, 2010; Harrison & Easton, 2002) and to a lesser extent, structuration (Ellis & Mayer, 2001; Nicholson et al., 2013; Peters, Gassenheimer, & Johnston, 2009). Both structuration and critical realism are approaches capable of gaining insight into both the structural properties inherent in a local atmosphere and the interplay such structure with agents that constantly shape and reform those structures. Within the relational economic geography perspective, Boggs and Rantisi (2003, p. 110) point further to the possible present and future synergy between Imp and EG when they state that

> "At an ontological level, the relational turn enters the structure-agency debate by ascribing a greater role to agency as opposed to structures in analyses of economic behaviour. The downside of [of structure oriented] approaches is that it does not provide insight into dynamic processes by which these differences are formed and transformed"

It is probable that the more traditional interpretive approach of the IMP was of less value in gaining a deeper understanding of local structures and their historical underpinnings. It is possible that study of agency and structure in local network dynamics can help to unlock findings in respect of network governance and knowledge transfer. The relational time concept (Halinen, 1998; Halinen & Tornroos, 1995) might be further enriched by considering both agency and structure as well as local dynamics.

CONCLUSION & RESEARCH AGENDA

The apparent openness of the IMP research tradition to ideas from other fields of study would be of little relevance were it not for the coincidence of interests between a core concern of economic geographers and the empirical context within which considerable IMP research has taken place. Much research in economic geography is concerned with "spatial clusters" (Bathelt et al., 2004; Bathelt & Schuldt, 2008), while a parallel stream of IMP research addresses the issue of "regional strategic networks" (Andresen et al., 2008; Eklinder-Frick, Eriksson, & Hallen, 2010; Eklinder-Frick et al., 2011; Eklinder-Frick et al., 2012; Helene Lundberg, 2002). The broad scientific goal of these streams of research is to understand the fundamental processes underlying regional economic development, while the normative goal is often to provide guidance to interested parties (often local government or local development agencies) how to promote regional economic prosperity, and for firms to better handle the political dimension of their strategic planning. IMP researchers, when approaching such investigations, tend to adapt the standard tools of industrial network analysis for the purpose; characteristically, their fundamental conceptualisation is of a regional industrial network. Economic geographers, however, bring to bear a toolbox that is arguably richer and more diverse.

A number of specific concepts originating from EG, that may prove useful to IMP researchers, have emerged from the analysis presented in this paper. The 'de-territorialisation of closeness' suggests that 'proximity' should be conceptualised as a multi-dimensional phenomenon, comprising cognitive, organizational, social, institutional and relational proximity in addition to geographical proximity. The concepts of untraded inter-dependencies arising from spillovers of knowledge and the various conceptualisations of externalities (Jacobs, Marshal/Arrow/Romer and Porter) offer potential enrichments to industrial network analysis. The EG concept of relational capital appears to be complementary to a number of constructs investigated by IMP researchers, such as relationship atmosphere, relationship value and relationship quality. Finally, IMP researchers interested in strategic regional networks may find the concepts of regional buzz, regional myopia, and 'pipelines' to distant communities relevant to their work.

While the apparent synergies between IMP and EG seem overwhelmingly clear, it is surprising to note that very little published IMP research makes reference to material drawn from EG. A preliminary search, using 'economic geography' as a search term in *Industrial Marketing Management* and *The Journal of Business and Industrial Marketing*, found very little citation of EG literature. Many articles published in business-to-business marketing (whether IMP-inspired or not) that explicitly discuss themes associated with EG (such as clusters, social capital and regional networks) make no reference to EG journals. However, it is interesting that so much of the IMP research cited in this paper was conducted very recently (publication dates of 2010 or later). There is considerable evidence that IMP researchers are becoming increasingly interested in phenomena that are also of interest to EG scholars. This looks like a trend that is set to continue. We propose that this emerging body of research would benefit from paying greater explicit attention to the huge body of existing literature in EG generally and evolutionary economic geography specifically. This paper is a tentative first step in that direction.

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